

SEQUENCE LISTING

<110> DE CROMBRUGGHE, BENOIT
AKIYAMA, HARUHIKO

<120> HA4, A NEW OSTEOBLAST- AND CHONDROCYTE-SPECIFIC SMALL
SECRETED PEPTIDE, COMPOSITIONS AND METHODS OF USE

<130> UTSC:772US

<140> UNKNOWN

<141> 2005-05-06

<150> PCT/US2003/035139

<151> 2003-11-04

<150> 60/423,690

<151> 2002-11-04

<160> 3

<170> PatentIn Ver. 2.1

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<213> Artificial Sequence

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<222> (1)..(735)

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<223> Description of Artificial Sequence: Synthetic
Primer

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ttc	ctt	gtg	ctg	ctg	ctg	ctt	cag	ttg	tcc	gca	ccg	tcc	agc	gcc	tct	96
Phe	Leu	Val	Leu	Leu	Leu	Gln	Leu	Ser	Ala	Pro	Ser	Ser	Ala	Ser		
		20				25						30				

gag	aac	ccc	aag	gtg	aag	caa	aaa	gcg	ctg	atc	cgg	cag	agg	gag	gtg	144
Glu	Asn	Pro	Lys	Val	Lys	Gln	Lys	Ala	Leu	Ile	Arg	Gln	Arg	Glu	Val	
		35				40					45					

gta	gac	ctg	tat	aat	gga	atg	tgt	cta	caa	gga	cca	gca	gga	gtt	ccc	192
Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala	Gly	Val	Pro	
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ggt	cgt	gat	ggg	agc	cct	ggg	gcc	aat	ggc	att	cct	ggc	aca	cct	ggc	240
Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Gly	Ile	Pro	Gly	Thr	Pro	Gly	
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atc	cca	ggt	cgg	gat	gga	ttc	aaa	ggg	gaa	aag	gga	gaa	tgc	tta	agg	288
Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	Gly	Glu	Cys	Leu	Arg	
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gaa agc ttt gag gag tcc tgg acc cca aac tat aag cag tgt tcg tgg	336
Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys Ser Trp	
100 105 110	
agt tcg ctg aac tat ggc ata gat ctt ggg aaa att gcg gag tgt aca	384
Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu Cys Thr	
115 120 125	
ttc acg aag atg cgc tcc aac agt gct ctg cga gtt ctg ttc agt ggc	432
Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly	
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tca ctt cgg ctc aaa tgc agg aat gca tgc tgt cag cgc tgg tat ttt	480
Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe	
145 150 155 160	
aca ttt aat gga gct gaa tgt tca gga cct ctt ccc atc gaa gcc atc	528
Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile	
165 170 175	
atc tat ctg gac caa gga agc cct gag tta aat tca act att aat att	576
Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile	
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cat cgt act tcc tct gtg gaa gga ctc tgt gaa ggg att ggt gct gga	624
His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly	
195 200 205	
ttg gta gat gtg gcc atc tgg gtt ggc acc tgt tca gat tac ccc aaa	672
Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys	
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gga gac gct tct act gga tgg aat tcc gtg tct cgc atc atc att gaa	720
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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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35 40 45	
Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro	
50 55 60	
Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly	

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Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	Tyr	Lys	Gln	Cys	Ser	Trp
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Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	Gly	Lys	Ile	Ala	Glu	Cys	Thr
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Thr	Phe	Asn	Gly	Ala	Glu	Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile
			165					170					175		
Ile	Tyr	Leu	Asp	Gln	Gly	Ser	Pro	Glu	Leu	Asn	Ser	Thr	Ile	Asn	Ile
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His	Arg	Thr	Ser	Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly
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Leu	Val	Asp	Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys
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Gly	Asp	Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu
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 <223> Description of Artificial Sequence: Synthetic
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